

REMARKS**INTRODUCTION:**

In accordance with the foregoing, new claim 18 has been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-18 are pending and under consideration. Reconsideration is respectfully requested.

REQUIREMENT OF NEW TITLE:

In the Office Action, at page 2, numbered paragraph 1, a new title was required. In view of the proposed amended title set forth above, the Examiner's concern about the title should be resolved.

REJECTION UNDER 35 U.S.C. §103:

A. In the Office Action, at pages 2-4, numbered paragraph 2, claims 1-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi et al. (USPN 6,741,534; hereafter, Takahashi) in view of Okumura (USPN 5,444,687; hereafter, Okumura). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

In contrast to the statement of the Examiner on page 3 of the Office Action, it is respectfully submitted that it is clear that Takahashi does not teach an apparatus to determine an area of an optical disc, comprising: ... a controller that counts a number of absolute time code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup, compares the number of counted ATIP syncs with a reference number of ATIP syncs, and determines the current position of the pickup based on a comparison result, when ATIP sync information read by the pickup indicates that the pickup is present in an area of the optical disk that is greater than or equal to 95 minutes (col. 15 lines 28-33), as is submitted by the Examiner. As admitted by the Examiner: "Takahashi does not teach this with ATIP information." Hence, Takahashi does not count a number of ATIP syncs, compare ATIP information, or determine a current position based on the ATIP information.

In contrast to the present invention, Takahashi, col. 14, line 65 through col. 15, line 12, recites:

The CPU 21 controls the respective sections of the disk drive 2. In the memory 22, preset data is stored. The optical pickup section 23 illuminates a light beam for reproduction on the optical disk to detect reflected light from the optical disk. The data reproduction processing section 30 reproduces data recorded on the optical disk based on the result of detection of the reflected light detected by the optical pickup section 23. On the other hand, the data recording processing section 29 creates ECC block data based on recording data provided from the host device 3 and further creates sector data from the ECC block data. The optical pickup section 23 illuminates a light beam for recording on which the sector data created by the data recording processing section 29 is reflected and records data on the optical disk. (emphasis added)

Further, in col. 15, lines 20-27, Takahashi recites:

The tracking error detecting section 26 detects a tracking error of the light beam illuminated by the optical pickup section 23 based on the result of detection of the reflected light detected by the optical pickup section 23. The tracking control section 27 controls tracking of the light beam illuminated by the optical pickup section 23 based on the tracking error detection result detected by the tracking error detecting section 26. (emphasis added)

Hence, Takahashi does not teach the use of ATIP, as is disclosed in independent claims 1, 6, or 10 of the present invention.

With respect to the Examiner's statement: "In regard to the limitation 'greater than or equal to 95 minutes,' the apparatus of Takahashi would inherently do this everywhere on the disk," it is respectfully submitted that generally, where the Examiner relies upon the theory of inherency, the Examiner is required to provide extrinsic evidence that the features are necessarily present in the reference. As noted in MPEP 2112, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (emphasis in original). Thus, in order for the burden to shift to the applicants, the Examiner needs to provide sufficient evidence of record as to the necessary result of the operations of Takahashi so as to afford the applicants an opportunity to examine and rebut any such evidence. Without such evidence, the Examiner is relying on conjecture and has not established a prima facie case based upon a theory of inherency.

Although the position information called "absolute time in groove" (ATIP) is a modulated and recorded wobble signal, typically encoded in the Lead-in Area of the disc, the Examiner has not provided evidence that the apparatus of Takahashi would inherently do this (have the limitation 'greater than or equal to 95 minutes') everywhere on the disk, as is recited in independent claims 1 and 6 of the present invention. Hence, it is respectfully submitted that the

Examiner has not provided sufficient evidence of record to show inherency in disclosing such features as set forth in the Office Action.

Okumura recites, col. 9, lines 41-53:

In the above described embodiment, the frequency of the write clock is determined on the basis of the position of the

record/reproduction head 43 in the radial direction. Alternatively, the record position may be obtained on the basis of a wobble signal previously embedded in the guide groove of a track on the optical disc 41 or position information called "absolute time in groove" (ATiP) which is a modulated and recorded wobble signal and the write clock may be generated on the basis of this write clock. In the case of a CD-MO generally, a clock signal can be obtained from a wobble signal during recording. This wobble signal is recorded by the CLV system. (emphasis added)

Hence, although Okumura recites using ATIP, Okumura does not teach or suggest a controller that "counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup, compares the number of counted ATIP syncs with a reference number of ATIP syncs, and determines the current position of the pickup based on a comparison result, when ATIP sync information read by the pickup indicates that the pickup is present in an area of the optical disc that is greater than or equal to 95 minutes" (emphasis added), as is recited in independent claim 1 of the present invention.

Similarly, Okumura does not teach or suggest "A method of determining an area of an optical disc, comprising: counting a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of a pickup when ATIP sync information recorded on the optical disc indicates that the pickup is currently present in an area of the optical disc that is greater than or equal to 95 minutes; and determining the current position of the pickup by comparing the number of counted ATIP syncs with a reference number of ATIP syncs" (emphasis added), as is recited in independent claim 6 of the present invention.

In addition, Okumura does not teach or suggest "A controller to determine a position of a pickup of an optical disc, comprising: a memory that stores a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc; a counter, coupled to the memory, that counts a number of ATIP syncs for one rotation of the optical disk at a current location of the pickup to provide a counted number of ATIP syncs; and a location determination unit, coupled to the counter and the memory, that compares the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track and determines a current position of the pickup based on a comparison result" (emphasis added), as is recited in independent claim 10 of the present invention.

Independent claim 10 of the present invention does not recite that the pickup is present in an area of the optical disk that is greater than or equal to 95 minutes.

Thus, even if combined, Takahashi and Okumura do not teach or suggest independent claims 1, 6, and/or 10 of the present invention. Hence, it is respectfully submitted that independent claims 1, 6 and 10 of the present invention are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687).

Since claims 2-5, 7-9 and 11-13 depend from independent claims 1, 6 and 10, respectively, claims 2-5, 7-9, and 11-13 of the present invention are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687) for at least the reasons that independent claims 1, 6 and 10 are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687).

B. In the Office Action, at page 5, numbered paragraph 2, claims 14-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi et al. (USPN 6,741,534; hereafter, Takahashi) in view of Official Notice. The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Takahashi does not teach or suggest "A computer-readable medium having computer-executable instructions stored thereon to determine a position of a pickup of an optical disc, wherein the computer-executable instructions include: storing a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc; counting a number of ATIP syncs for one rotation of the optical disk at a current location of a pickup to provide a counted number of ATIP syncs; comparing the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track to determine a comparison result; and determining a current position of the pickup based on the comparison result" (emphasis added), as is recited in independent claim 14 of the present invention. That is, Takahashi does not teach or suggest using a computer-readable medium with computer executable instructions thereon, storing a reference number of a time-code in ATIP syncs for each track, counting the ATIP syncs and comparing the number of ATIP syncs with the reference number of ATIP syncs to determine a position of the pickup based on the comparison. Nowhere in Takahashi are ATIP syncs discussed or suggested.

The Official Notice that the operations of Takahashi may be implemented using a computer program does not teach or suggest using a computer-readable medium with computer

executable instructions thereon, storing a reference number of a time-code in ATIP syncs for each track, counting the ATIP syncs and comparing the number of ATIP syncs with the reference number of ATIP syncs to determine a position of the pickup based on the comparison.

Thus, even if combined, Takahashi and the Official Notice do not teach or suggest independent claim 14 of the present invention. Hence, it is respectfully submitted that independent claim 14 is patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of the Official Notice. Since claims 15-17 depend from independent claim 14, claims 15-17 are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of the Official Notice for at least the reasons that independent claim 14 is patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of the Official Notice.

NEW CLAIM:

New claim 18 recites that the features of the present invention include an apparatus to determine an area of an optical disc, comprising: a pickup that reads/records a signal from/to the optical disc; and a controller that counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup, compares the number of counted ATIP syncs with a reference number of ATIP syncs, and determines the current position of the pickup based on a comparison result, when ATIP sync information read by the pickup indicates that the pickup is present in an area of the optical disk that is greater than or equal to 95 minutes.

Nothing in the prior art teaches or suggests such. It is submitted that this new claim distinguishes over the prior art.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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